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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/614,591	07/07/2003	David Anthony Akerman	CM2495CL	7600
24256	7590	09/29/2004	EXAMINER	
DINSMORE & SHOHL, LLP 1900 CHEMED CENTER 255 EAST FIFTH STREET CINCINNATI, OH 45202			EINSMANN, MARGARET V	
			ART UNIT	PAPER NUMBER
			1751	

DATE MAILED: 09/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/614,591

Applicant(s)

AKERMAN ET AL.

Examiner

Margaret Einsmann

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
 Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 7/26/04.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) 9-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 9-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

Applicant's amendment filed July 20, 2004 has been entered. It has resulted in the mooted of all of the rejections as applied to claims 1-8 since they have been canceled and a new set of claims presented. Claims 9-25 are pending.

***Priority***

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in UK 0100192.4 on 1/05/2001. It is noted, however, that applicant has not filed a certified copy of the UK application as required by 35 U.S.C. 119(b).

The examiner is not able to find a copy of the document on the IFW image. We no longer have access to the paper copies.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 9, 10, 12, 15, 16, 17, 20, 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Hoyer et al., US 4,492,654.

Hoyer discloses fiber reactive disazo compounds which contain the limitations of applicant's claimed compound 3 in its alternative tautomeric form and methods of dyeing and

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printing fibrous materials therewith. See the abstract and the formula (1) in column 1 lines 43 et seq. Note that X in formula 1 denotes a fluorine, chlorine or bromine atom. Example 1 in column 5 is applicant's formula 3 when R1 is hydrogen, one R2 is bromine and one is hydrogen and X is bromine and both n and m are 1, R3 in each instance is betasulfatoethylsulfonyl para to the azo group as claimed in claims 2- 5. Example 2 in column 6 is the same dye except that both R2's are hydrogen. Accordingly the dyes claimed in claims 9, 12 and 17 are clearly anticipated by this reference. Regarding the limitations of the process claims, Hoyer teaches that the compounds are used for the dyeing and printing of cellulose fiber materials, wool, silk, polyamide-6, polyamide-6,6, polyamide-11, polyamide-4 or leather. While Hoyer does not disclose that the dyeings have enhanced dye fastness Relative to reactive Black 5, since they are using the same dye as applicant is claiming, the dyeings produced must be equivalent to applicant's dyeings, since a compound cannot be separated from its properties.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoyer.

Hoyer relied upon as set forth in the above rejection as providing structural examples of the dyes claimed in claims 9, 12, and 17. Noting the formula of the dyes in Hoyer column 1 line 43 et seq, it can be seen that the dyes claimed in the remaining claims are also disclosed though not exemplified. The dyes of claims 11, 14, 14, 18 and 22 differ from the dye of example 2, which is

the closest example in Hoyer to the claimed dyes, by claiming X is chlorine while the dye of example 2 of Hoyer has X= bromine. Hoyer teaches the equivalence of chlorine to bromine in the general formula wherein X is defined. Noting the examples 4-49 it is seen that chlorine is frequently substituted for bromine at the 2 position. Because of this teaching of equivalence in Hoyer, it would have been obvious to the skilled artisan to make and use the dyes as claimed wherein chlorine is substituted for bromine in example 2 with the expectation of equivalent dyeing results.

Claims 9-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In formula 3 there are two each of A and B; in the original claims 1-8, A and B designated phenyl rings which are part of the basic structure of the azo dye; in the pending claims, in addition to phenyl rings A and B each designate a heterocyclic ring which may be an alternative value of R3. The basis for the heterocyclic rings in claims 9 and 17 is on page 6 but nowhere in the specification are they referred to as substituents A and B.

Claims 15 and 16 are redundant because they both claim dyeing the same substrates with the same dye.

Claim 23 states that R3 is in position 4 and 5 in each case. There is no position 4 or 5 in ring D.

Claim 23 is redundant as it claims the same limitations as in claim 14.

The term "previously published property" is not understood. If applicant is claiming a new and unobvious dye, how can its properties have been previously published? Where is the basis for that statement in the specification?

### **Specification**

On line 5 of page 2 of the specification applicant refers to "Z" in the dye of 4,492,654.


However, there is no Z in said formula.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Margaret Einsmann whose telephone number is 571-272-1314. The examiner can normally be reached on 7:00 AM -4:30 PM M-Th and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on 571-272-1316. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

September 27, 2004

  
Margaret Einsmann  
Primary Examiner  
Art Unit 1751